

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-24. (Canceled)

25. (Currently amended) An information backup system comprising:

a plurality of computer systems, each including a disk subsystem and a network interface, wherein each computer system is configured to direct disk I/O requests to said network interface;

~~a communication network, to which at least some each of said computer systems is are communicatively coupled,~~ said network configured to communicate said disk I/O requests and data associated with said disk I/O requests among said plurality of computer systems;

a functionally coherent and physically distributed cache memory comprising a plurality of memory portions each within a memory of a computer system among ~~a first set of said said plurality of~~ computer systems; and

a functionally coherent and physically distributed data storage device comprising a plurality of data storage portions each within a data storage device of a computer system among said ~~first set of~~ plurality of computer systems, ~~at least one of said computer systems being configured to perform data I/O with said functionally coherent and distributed data storage device~~

wherein said distributed data storage device responds to said disk I/O requests from said plurality of computers as a single logical disk.

26. (Currently amended) The system of claim 25 wherein said functionally coherent and physically distributed cache memory is operable as data cache for said disk I/O operations with said functionally coherent and physically distributed data storage device.

27-29. (Canceled)

1 30. (Currently amended) The system of claim 25 wherein said functionally
2 coherent and physically distributed data storage device is configured as a functionally coherent
3 and physically distributed redundant array of independent disks (RAID) storage device.

1 31. (Currently amended) The system of claim 25 wherein said memory
2 portions are portions of volatile random access memories of said ~~first-set~~ plurality of computer
3 systems.

32-36. (Canceled)

1 37. (Currently amended) A method for operating an information backup
2 system comprising:
3 organizing into a unified logical disk data-storage device at least one data storage
4 portion from each of a ~~first~~-plurality of computer systems of said network; and
5 performing data-disk I/O access to the unified data storage device using a
6 distributed cache memory that includes at least one memory portion from each of a ~~second-said~~
7 plurality of computer systems of said information ~~network~~ backup system.

38-40. (Canceled)

1 41. (Currently amended) The method of claim 37 further comprising
2 configuring said distributed data storage device as a distributed redundant array of independent
3 disks (RAID) storage device.

1 42. (Previously presented) The method of claim 37 in which volatile
2 memories are configured as at least some of the memory portions.

43. (Canceled)

1 44. (Currently amended) An information backup system comprising:
2 a plurality of computer systems;

3 a communication network, to which ~~at least some of~~ said computer systems are
4 communicatively coupled;

5 a distributed cache memory comprising a plurality of memory portions, each
6 memory portion being a portion of a memory of a computer system among ~~a subset of~~ said
7 plurality of computer systems, said memory portions being organized to function as a single
8 coherent cache memory; and

9 a distributed data storage device comprising a plurality of data storage portions,
10 each data storage portion being a portion of storage of one or more data storage devices of a
11 computer system among said ~~subset~~ plurality of computer systems, said data storage portions
12 being organized to function as a single data storage device, wherein said computer systems can
13 perform ~~data-disk~~ I/O with said distributed data storage device as a single logical disk and
14 wherein said distributed cache memory is operable as a cache memory for said distributed data
15 storage device.

1 45. (Currently amended) An information backup system comprising:

2 a plurality of computer systems;

3 each computer system among at least a first subset of said computer systems
4 having first means for performing distributed caching, wherein each first means provides a
5 portion of memory from its corresponding computer system, wherein all of said first means
6 cooperate to provide a unified system cache memory from among said portions of memory; and

7 each computer system among said first subset further having second means for
8 performing distributed data storage, wherein each second means provides a portion of data
9 storage of a data storage device from its corresponding computer system, wherein all of said
10 second means cooperate to provide a ~~single data~~ distributed disk storage device, wherein said
11 computer systems access said ~~single data~~ distributed disk storage device to perform disk I/O as a
12 single logical disk.

1 46. (Currently amended) A method for an information backup system
2 comprising a plurality of computer systems, the method comprising:

3 each computer system among a ~~first set of~~ said plurality of computer systems
4 providing a portion of its ~~RAM-random access~~ memory, collectively referred to as a plurality of
5 memory portions;
6 organizing said memory portions into a unified cache memory;
7 each computer system among said ~~first set~~ plurality of computer systems
8 providing a portion or portions of one or more its data storage devices, collectively referred to as
9 a plurality of data storage portions; and
10 organizing said data storage portions into a ~~single~~ distributed data storage device;
11 and
12 providing ~~data-disk~~ I/O access to said ~~single~~ distributed data storage device,
13 wherein any of said plurality of computer systems can access said ~~single~~ distributed data storage
14 device as a single logical disk.